CLAIMS

1. A dynamic planning method comprising:

generating a project list with a plurality of activities;

selecting two or more activities from a plurality of activities within a project plan;

generating a time precedence relationship between the selected activities

structuring the one or more activities with an activity pre-structured process model;

structuring the time precedence relationships with an activity relationship pre-structured model;

associating an activity characteristics value with the activity pre-structured process model;

associating an activity relationship value with the activity relationship pre-structured model to provide a dynamic planning method (DPM) project planning model; and

dynamically adjusting the DPM project planning model to provide a DPM project plan.

2. The method of claim 1, wherein associating an activity characteristics value with the activity pre-structured process model comprises:

providing a user-defined activity reliability value for each of the one or more activities; and

associating the activity reliability value with the activity relationship pre-structured model.

3. The method of claim 1, wherein associating an activity characteristics value with the activity pre-structured process model comprises:

providing a user a user-defined production type value for each of the one or more activities;

associating the production type value with the activity pre-structured process model.

4. The method of claim 1, wherein associating an activity relationship value with the activity relationship pre-structured model comprises:

providing a user-defined time precedence relationship between the one or more activities;

associating the time precedence relationship with the activity relationship pre-structured model.

5. The method of claim 1, wherein associating an activity relationship value with the activity relationship pre-structured model comprises:

providing a user-defined sensitivity value for the time precedence relationship;

associating the sensitivity value with the activity relationship pre-structured model.

6. The method of claim 1, further comprising:

associating a policy value with the activity pre-structured process model.

7. The method of claim 6, wherein associating the first policy value with the activity pre-structured process model comprises:

providing the first policy value as a user-defined first policy value;

associating the first policy value with the activity pre-structured process model.

8. The method of claim 1, wherein dynamically adjusting the DPM project planning model to provide a DPM project plan comprises:

automatically generating one or more reliability buffers in association with respective ones of the one or more activities to, wherein each reliability buffer has a duration value, an upstream time precedence relationship between the reliability buffer and an upstream activity, and a downstream time precedence relationship between the reliability buffer a downstream activity, to provide the DPM project plan.

9. The method of claim 8, wherein the downstream time precedence relationship is finish to start with no lag or lead.

10. The method of claim 8, wherein the automatically generating one or more reliability buffers comprises:

associating the activity characteristics value, the activity relationship value, the activity pre-structured process model, and the activity relationship pre-structured model.

11. The method of claim 10, wherein the automatically generating one or more reliability buffers further comprises:

associating the policy value with the activity pre-structured process model, and the activity relationship pre-structured model.

12. The method of claim 8, further comprising:

selecting one or more updated activities;

providing at least one of updated activity characteristics data, updated activity relationship data, and updated policy data associated with the updated activities, to provide an updated DPM project planning model; and

dynamically updating the DPM project planning model to provide an updated DPM project plan.

13. The method of claim 12, wherein dynamically updating the DPM project planning model to provide an updated DPM project plan comprises:

automatically generating one or more updated reliability buffers in association with respective ones of the one or more updated activities, wherein each updated reliability buffer has an updated duration value, an updated time precedence relationship between the updated reliability buffer and an upstream activity, and an updated time precedence relationship between the updated reliability buffer and an upstream activity, to provide the updated DPM project plan.

14. The method of claim 13, wherein automatically generating one or more updated reliability buffers comprises:

associating the updated activity characteristics value, the updated activity relationship value, the activity pre-structured process model, and the activity relationship pre-structured model.

15. The method of claim 14, wherein automatically generating one or more updated reliability buffers comprises further comprises:

identifying a similar activity corresponding to a respective one of the one or more updated activities, having similar activity characteristics values, similar activity relationship values and similar policy values, based upon a similarity criteria;

associating the similar activity characteristics values, the similar activity relationship values, the similar activity pre-structured process model, and the similar activity relationship pre-structured model; and

adjusting the duration values, the upstream time precedence relationships and the upstream time precedence relationship of the updated reliability buffers.

16. The method of claim 15, wherein the similarity criteria is equality.

17. A dynamic planning apparatus comprising:

a dynamic planning method (DPM) data processor that provides activity data that is a combination of policy data, activity characteristics data, and activity relationship data; and

a DPM processor coupled to the DPM data processor to process the activity data to provide a DPM project plan.

18. The dynamic planning apparatus of claim 17, wherein the DPM processor also provides one or more DPM performance profiles.

19. The dynamic planning apparatus of claim 17, wherein the DPM data processor includes:

a DPM policy data processor that provides the policy data; and

a DPM activity data processor, that provides the activity characteristics data and the activity relationship data.

20. The dynamic planning apparatus of claim 19, wherein the DPM activity data processor includes:

a DPM activity characteristics graphical user interface (GUI) that provides the activity characteristics data; and

a DPM activity relationship GUI that provides the activity relationship data.

21. The dynamic planning apparatus of claim 20, wherein the DPM activity data processor includes a dependency structure matrix GUI for entry of the activity characteristics data and the activity relationship data.

22. The dynamic planning apparatus of claim 21, further comprising:

one or more conventional project planning models that provide conventional project plan data; and

a data transfer processor coupled to the one or more conventional project planning models and further coupled to the DPM data processor to receive the conventional project plan data from the one or more conventional project planning models and to provide formatted data to the DPM data processor.